REMARKS

Claims 1-15 are present in this application. Claims 1, 10, 11, and 15 are independent claims.

Claim Rejection under 35 USC 102(b) – Ueda

Claims 1, 3-5, 7, 8, 10-15 have been rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,796,470 (Ueda). Applicants respectfully traverse this rejection.

Embodiments covered by claim 1 are directed to an optical moving amount detecting device for detecting an amount of movement of a detection object, the detection object having a surface with certain surface conditions to reflect light cast thereon so that the light has a spatial output distribution (see Specification at para. 0015; Fig. 4).

The optical moving amount detecting device includes, among other things, a storage unit for

storing first output waveform signals

that are outputted from the light receiver receiving the linear reflected beam at a first time point and

that represent an output distribution of the linear reflected beam along a longitudinal direction thereof and

that correspond to said surface conditions of the detection object, and

storing second output waveform signals

that are outputted from the light receiver receiving the linear reflected beam at a second time point and

that represent an output distribution of the linear reflected beam along the longitudinal direction thereof and

that correspond to said surface conditions of the detection object,

In the section "Response to Arguments," the Office Action states that, "Ueda discloses all of the limitations of the rejected claims in addition to employing the Doppler frequency in its measurements, and Ueda makes at least two measurements over two points in time in order to calculate the velocity of the object (7)."

In the present invention, the surface of the detection object reflect light cast thereon so that the light has a spatial output distribution (see Specification at para. 0015; Fig. 4). The first and second waveform signals represent an output distribution of the linear reflected beam along a longitudinal direction (Fig. 2, para. 0053), and correspond to the surface conditions of the detection object (Fig. 4, para. 0055). Thus, the first and second waveform signals correspond to a shift in the surface of the detection object. Subsequently, a moving amount detecting unit of the present optical moving amount detecting device detects an amount of movement of the detection object on the basis of the amount of shift between the first output waveform signals and the second output waveform signals.

Applicants submit that Ueda does not utilize surface conditions in determining an amount of movement of a detection object. This deficiency applies to each of the present independent claims.

Accordingly, Applicants submit that the rejection fails to establish *prima facie* anticipation, and respectfully requests that the rejection be reconsidered and withdrawn.

Claim Rejection under 35 USC 103(a) – Ueda, Okada

Claim 2 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda in view of U.S. Patent 6,754,246 (Okada). Applicants traverse this rejection.

At least for the reasons above for claim 1, Applicants submit that the rejection fails to establish *prima facie* obviousness for claim 2.

Claim 2 is directed to the optical moving amount detecting device of claim 1, wherein the light emitter is composed of a plurality of semiconductor laser devices disposed linearly.

The Office Action states that it would have been obvious to provide the light source of Okada to the device of Ueda "for the purpose of improving overall parallelism of the laser beams, thus improving focusing of the device." (Office Action at page 9). Applicants disagree.

Okada does appear to teach focusing to a small region, for example to an optical fiber 3. However, although Ueda uses parallel light beams 3 provided by a collimator lens 2, Ueda's system does not include focusing to a small region. Subsequently, Applicants submit that there would be no reason to use the focusing taught by Okada, and much less improve focusing, in the frequency shifter of Ueda.

For at least this additional reason, Applicants submit that the rejection fails to establish *prima facie* obviousness for claim 2.

Claim Rejection under 35 U.S.C. 103(a) – Ueda, Costanza

Claim 9 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda in view of U.S. Patent 5,204,620 (Costanza). Applicants traverse this rejection.

At least for the reasons above for claim 1, Applicants submit that the rejection fails to establish *prima facie* obviousness for claim 9. Applicants request that the rejection be reconsidered and withdrawn.

CONCLUSION

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants respectfully petition for a two (2) month extension of time for filing a response in connection with the present application and the required fee of $450.00 is being filed concurrently herewith.

Should the Examiner have any questions regarding this matter, she is respectfully requested to contact Robert W. Downs (Reg. No. 48,222), who may be reached in the Washington, DC, area at (703) 205-8000.

If necessary, the Commissioner is hereby authorized in this concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

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Respectfully submitted,

By _____
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